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EXAMINER

NGUYEN, S

ART UNIT

PAPER NUMBER

2731

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Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trademarks

Office Action Summary

Application No.

09/041,534

Applicant(s)

Short et al

Examiner

Steven Nguyen

Group Art Unit

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☒ Responsive to communication(s) filed on 11/4/99 (Amendment A)

☒ This action is **FINAL**.

☐ Since this application is in condition for allowance except for formal matters, **prosecution as to the merits is closed** in accordance with the practice under *Ex parte Quayle*, 35 C.D. 11; 453 O.G. 213.

A shortened statutory period for response to this action is set to expire 3 month(s), or thirty days, whichever is longer, from the mailing date of this communication. Failure to respond within the period for response will cause the application to become abandoned. (35 U.S.C. § 133). Extensions of time may be obtained under the provisions of 37 CFR 1.136(a).

Disposition of Claim

☒ Claim(s) 1-18, 20-27, and 31-71 is/are pending in the applicat

Of the above, claim(s) _____ is/are withdrawn from consideration

☐ Claim(s) _____ is/are allowed.

☒ Claim(s) 1-18, 20-27, and 31-71 is/are rejected.

☐ Claim(s) _____ is/are objected to.

☐ Claims _____ are subject to restriction or election requirement.

Application Papers

☐ See the attached Notice of Draftsperson's Patent Drawing Review, PTO-948.

☐ The drawing(s) filed on _____ is/are objected to by the Examiner.

☐ The proposed drawing correction, filed on _____ is ☐ approved ☐ disapproved.

☐ The specification is objected to by the Examiner.

☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. § 119

☐ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).

☐ All ☐ Some* ☒ None of the CERTIFIED copies of the priority documents have been

☐ received.

☐ received in Application No. (Series Code/Serial Number) _____

☐ received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

*Certified copies not received: _____

☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

Attachment(s)

☒ Notice of References Cited, PTO-892

☐ Information Disclosure Statement(s), PTO-1449, Paper No(s). _____

☐ Interview Summary, PTO-413

☐ Notice of Draftsperson's Patent Drawing Review, PTO-948

☐ Notice of Informal Patent Application, PTO-152

--- SEE OFFICE ACTION ON THE FOLLOWING PAGES ---

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DETAILED ACTION

Response to Amendment

1. This action is in response to the amendment A filed on 11/4/99. Claims 19, 28-30 have been canceled and claims 1-18, 20-27 and 31-71 are pending in the application.

Claim Objections

2. Claims 17-18 and 20-21 are objected to because of the following informalities:

The limitation of claims 17-18 and 20-21 are a redundant of claim 1; Since claim 1 is already comprised a first, second interface and processor. Appropriate correction is required.

Claim Rejections - 35 USC § 112

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. Claim 1, 45, 37, 44, 50, and 53-54 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Regarding claims 1 and 45, the recitation "determining if the data transmitted from the user device is compatible with the foreign network" is vague and indefinite because it's unclear

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because if the data transmitted from the user is already compatible with the foreign network. It does not have an incompatible data, then data is never modified. Furthermore, the recitation has two results such as if data is compatible then it will not be modified otherwise it will be modified to be compatible with the foreign network. Furthermore, the data which transmit by the protocol such as Internet protocol. It's unclear how is a data is incompatible with a foreign network because only protocol or network address is incompatible with a foreign network.

Regarding claim 37, the recitation "router" does not refer to any previous device.

Regarding claim 44, the recitation "a router as in claim 43" and the router, is vague and indefinite because it does not refer to any previous claims. In the claim 1, the applicant claims a translator which uses for connecting a user device to a foreign network. Then, in the claims 44, the applicant just assumes the translator is a network which has a router to perform translation as a translator device.

Regarding claim 50, the recitation "the router" is vague and indefinite because it does not refer back to any previous element.

Regarding claims 53-54, the preamble of the claims must be consistent with the claim 45. There is insufficient antecedent basis for this limitation in the claims.

The applicant should check and correct all 112 second paragraph.

5. The amendment filed 11/26/99 is objected to under 35 U.S.C. 132 because it introduces new matter into the disclosure. 35 U.S.C. 132 states that no amendment shall introduce new

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matter into the disclosure of the invention. The added material which is not supported by the original disclosure is as follows:

Regarding claims 1, the recitation “determining if the data transmitted from the user device is compatible with the foreign network” because the specification discloses the translator always performs the translation (See Page 3, lines 17-21; Page 22, lines 1-10).

Regarding claims 58 and 67, the recitation “replies to the DHCP request with compatible network configuration settings” is not disclosed in the specification because in the specification the applicant discloses that if a DHCP server is not available, the translator will switch to another method to learn about the network configuration (See Page 21, lines 1-6). So the DHCP request will not replies a compatible network configuration setting.

Applicant is required to cancel the new matter in the reply to this Office action.

Claim Rejections - 35 USC § 102

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371© of this title before the invention thereof by the applicant for patent.

7. Claims 1, 2-5, 9-10, 16-18, 20-21, 26-27, 31-35, 38-39, 45, 46-49, 53-55, 58-66, 67-70

are rejected under 35 U.S.C. 102(e) as being anticipated by Li et al (USP 6012088) and Egevang

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(PUB RFC 1631 used as an extrinsic evidence to show the primary reference contains an enabled disclosure).

Regarding claims 1, 17-18, 20-21, 26-27, 31-34, 45 and 63-66, Li discloses a translator (Fig 6, 240) which comprises a plurality of interfaces for connecting to a user device and a foreign network (See col 3, lines 39-45); However, Egevang discloses a processor which configures to intercept the data of the user device and the foreign network for determining settings of the foreign network and the user device; determining if the data transmitted from the user device is compatible with the foreign network, modifying the incompatible data to be compatible with the foreign network and transmitting the modified data to the foreign network via the second interface (Fig 2 discloses network address translation which configured to intercept transmitting packets from user device for determining the network setting of foreign network and user device to perform network address translation, since the address of user device and the address of foreign network are different).

Regarding claims 2-5, 9-10, 46-49 and 53-54, Egevang discloses the terminal has a permanent address (IP 10.33.96.5); the translator has a translator address (IP 198.76.29.7); the terminal transmits outgoing data to the communication system including the permanent address as a source address; and the processor translates the outgoing data by replacing the permanent address with the translator address as the source address (Page 3, line 1-11, when a host wants to transmit an outgoing packet to the communication system; the translator replaces the source address with the translator source address).

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Regarding claim 16, Li fails to disclose the claimed invention. However, in the same field of endeavor, Evagant discloses a translator which communicates with another translator that is connected to a home device and is configured to function as a home agent (See Translator between two LANs).

Regarding claims 35 and 38-39, it would have been explicit to one of ordinary skill in the art at the time of the invention was made to configure the processor to perform data protocol conversion, provide a session loss prevention to the user device in the event failure and response to a request on a remote resource which was cached locally in the translator, gateway or router.

Regarding claims 43-44, Li discloses a routing table (See Fig 6, Ref 234). Therefore, it would have been explicit to one of ordinary skill in the art at the time of the invention was made to read the routing table of a translator wherein the first address is pair with second address and replacing the first address with second address as a destination address and replace the second address with the first address as source address to forward incoming data to its destination in order to route the data packet to its destination.

Regarding claims 55 and 69-70, Li et al discloses a device which intercepts a packet transmitted by the user device to determine a static IP address; transmitting a DHCP request on the network to a DHCP server to determine an available network IP address for a user device, modifying the packets transmitted by the user device based on an available IP address; then transmitting the modifying packets on the network to provide a network access to a user (Fig 4-6, discloses an Internet access device which allows an automatic configuration the user device and

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perform the modification packet by Ref 240 of Fig 6, the address translation performs the modification packet).

Regarding claims 67-68, Li discloses a method of automatic configuration an Internet access device which includes a DHCP, Apple talk, RIP, ARP method for intercepting the message which transmitted by a user device and assigning the network address to a user device (Col 8, lines 5-50).

Regarding claim 58, claim 58 is similar to claim 67. Therefore, claim 58 is rejected under similar rationale.

Regarding claims 59-62, Li discloses a network address translation which replaces source address with a router address (See Fig 6, Ref 240, IP router/address translation performs as address translation as disclosing in Evegant).

Claim Rejections - 35 USC § 103

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to

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the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103© and potential 35 U.S.C. 102(f) or (g) prior art under 35 U.S.C. 103(a).

9. Claim 36 is rejected under 35 U.S.C. 103(a) as being unpatentable over Li and Egevang as applied to claim 1 above, and further in view of Perkins (USP 5412654).

Regarding claim 36, Li fails to disclose the processor which configures to perform dynamic creation and maintenance of a wireless network with capability to route a data packet across multiple wireless hops transparently to the terminal. However, in the same field of endeavor, Perskins discloses the processor which configures to perform dynamic creation and maintenance of a wireless network with capability to route a data packet across multiple wireless hops transparently to the terminal (See Abstract).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to apply the teaching of Perskins such as configuring the processor of mobile host transmitting a data packet across multiple wireless hops into the communications system of Li in order to transmit a data packet across a multiple wireless hops.

10. Claim 6-8, 11-14, 37, 50-52, 56-57 and 71 are rejected under 35 U.S.C. 103(a) as being unpatentable over Li and Egevang as applied to claims 1, 45, 55 and 70, above, and further in view of Norris (USP 5557748).

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Regarding claims 6, 8, 50 and 52, Li fails to disclose claimed invention. However, Norris discloses the use of ARP method for a network device to reply to an ARP request message a device on the home network with a translator hardware address and the terminal transmits its outgoing data to the translator address (Col 10, lines 6-10). Even without Norris, it would have been obvious to one skill in the art to recognize that ARP which used to resolve the unknown address. Since, the method of ARP is well known in the art to resolve the network address. The suggestion/motivation would have been to determine network environment and self configuration device.

Regarding claims 7, 11-14, 37 and 51, Li discloses an translation address device as disclosed in Evegant such as the processor which is configured to operate in which it translates all outgoing data; and the processor determines the permanent address from outgoing data (Page 3 discloses all the outgoing data from the terminal will be translated by the NAT router which determines the permanent address of the terminal). Norris discloses a method of using a promiscuous mode to determine the address (See Fig 4). Since snoop or promiscuous mode is well known in the art to intercept the packets on the media to determining the network address. Therefore, it would have been obvious to one skill in the art to apply the snoop or promiscuous mode of Norris into any network interface for decoding the MAC and the network address and performing ARP, DHCP or BOOTP to resolve the network address of Li's device. The suggestion/motivation would have been to determine network environment and self configuration device.

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Regarding claims 56 and 71, Li fails to fully disclose the claimed invention. However, Norris discloses a method of detecting ARP message which transmitted by a user device and replies the MAC address of device on the network and destination address of the device on the home network (Col 10, lines 6-10). Even without Norris, it would have been obvious to one skill in the art to recognize that ARP which used to resolve the unknown address. Since, the method of ARP is well known in the art to resolve the network address. The suggestion/motivation would have been to determine network environment and self configuration device.

Regarding claim 57, Li discloses determining a network setting based on a user network address. However, Li fails to disclose a method of using a promiscuous mode to intercept all packets. In the same field of endeavor, Norris discloses a method of using promiscuous mode to intercept all packets (Col 5, lines 52-65). Since snoop or promiscuous mode is well known in the art to intercept the packets on the media to determining the network address. Therefore, it would have been obvious to one skill in the art to apply the snoop or promiscuous mode of Norris into any network interface for decoding the MAC and the network address and performing ARP, DHCP or BOOTP to resolve the network address of Li's device. The suggestion/motivation would have been to determine network environment and self configuration device.

11. Claims 22-25 and 40-42 are rejected under 35 U.S.C. 103(a) as being unpatentable over Li and Egevang as applied to claim 1, above, and further in view of Mayes (USP 5793763).

Regarding claims 22-25, Li fails to disclose a translator which is a PCMCIA or Card including a memory for executing a software to perform the self configuration. However, Mayes

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discloses a translator device is a card such as PCMCIA (See col 3, lines 65 to col 4, lines 10). Since, PCMCIA is well known in the art for connecting into a socket of Laptop etc. Therefore, it would have been obvious to one ordinary skill in the art to apply Mayes' teaching such as using PCMCIA to perform a self configuration by executing a software into Li's device. The suggestion/motivation would have been to carry easily when the user travels.

Regarding claims 40-42, Li fails to disclose the claimed invention. However, the method of configuring a processor to perform such as a file synchronization across the communication system, performing database synchronization among a plurality of terminals and providing e mail with file replication and reconciliation without the terminal having to request replication or reconciliation is well known in the art.

12. Claims 15 is rejected under 35 U.S.C. 103(a) as being unpatentable over Li and Egevang as applied to claim 1, above, and further in view of Compliment (USP 5909549).

Regarding claim 15, Li fails to disclose a method of using SNMP to transmit a network configuration. However, Compliment discloses a method of using SNMP (see abstract). Since, SNMP is well known in the art. It would have been obvious to one of ordinary skill in the art to recognize and apply the Simple Network Management Protocol as show by Complement into Li's device.

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Conclusion

13. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Hashimoto (USP 5781552) discloses a method of assigning a network address to a user device.

Dobbins (USP 5751971) discloses a method of using ARP.

Aravamudan et al (USP 6006272) discloses a method of NAT.

Bare (USP 5920699) discloses a network switch which uses a ARP.

Perlman (USP 5309437) discloses a method of bridge like IP router.

Cole (USP 5854901) discloses a method of using ARP to resolve the address.

Brewer et al (USP 5918016) discloses a method of automatic configuration a user device.

Cone (USP 5915119) discloses a method of controlling the user terminals in the suspend mode.

14. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period

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will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.


15. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Steven Nguyen whose telephone number is (703) 308-8848. The examiner can normally be reached on Monday through Friday from 8:30 AM to 5:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chi Pham, can be reached on (703) 305-4378.

The fax phone number for this group is (703) 305-3988.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (703) 305-4700.

Steven Nguyen
Art Unit 2731
January 29, 2000


CHI H. PHAM
SUPERVISORY PATENT EXAMINER
GROUP 2700
1/31/00